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of Engineers**

Waterways Experiment  
Station

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# **Index of REMR Technology and Listing of REMR Research Publications**

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# PREFACE

## REMR Research Publications Index of REMR Technology

✓ This index lists information sources useful to anyone engaged in repair, evaluation, maintenance, and rehabilitation (REMR) activities in the following areas: coastal, concrete and steel structures, electrical and mechanical, environmental impacts, geotechnical, hydraulics, and operations management.

— The pamphlet is divided into five parts. Part 1 is a subject index, referencing technology addressed in the diverse REMR Research publications. Parts 2 through 5 are lists of the titles of these publications: technical reports, technical notes and material data sheets, articles from *The REMR Bulletin*, and videos.

— Entries are current through September 1990 and will be updated periodically. (KR) ←

This index was compiled by Ms. Nancy Curtis, REMR Research Program.

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# PART 1

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## Subject Index of REMR Documents

All REMR technology--as published in technical reports, technical notes, material data sheets, as well as articles from *The REMR Bulletin* through September 1990--is indexed by subject. The first entry listed is a problem area of the REMR Research Program. The problem areas are as follows:

- COASTAL
- CONCRETE AND STEEL STRUCTURES
- ELECTRICAL AND MECHANICAL
- HYDRAULICS
- OPERATIONS MANAGEMENT
- ENVIRONMENTAL IMPACTS
- GEOTECHNICAL

Additional subject categories are listed in an hierachial order to assist in the rapid identification of pertinent REMR publications. This section serves to identify the codes (letters and numbers) of the publications containing information on a subject area. Parts 2, 3, and 4 can then be used to obtain the full name of the publication. The basic codes are as follows:

Technical reports - TR followed by the problem area abbreviation and report number;

*The REMR Bulletin* - RB followed by the volume and number of issue;

## REMR Index

The REMR Notebook - CM (concrete materials), CO (coastal), CS (concrete and steel), EI (environmental), EM (electrical and mechanical), GT (geotechnical), HY (hydraulics), and OM (operations management), followed by additional identifiers.

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### REMR Technical Reports

REMR technical reports published through September 1990 are listed according to the REMR Problem Area under which the research was conducted. These categories are as follows:

- COASTAL
- CONCRETE AND STEEL STRUCTURES
- ELECTRICAL AND MECHANICAL
- ENVIRONMENTAL IMPACTS
- GEOTECHNICAL
- HYDRAULICS
- OPERATIONS MANAGEMENT

Reports have been widely distributed throughout the Corps; division and district libraries have copies on file. Hard or microfiche copies of reports listed with AD numbers can be purchased from the National Technical Information Service, US Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161 (telephone (703) 487-4600). Cost of these reports varies. Price information is available from NTIS on request. Additional information concerning the reports can be obtained from the REMR Technology Transfer Specialist at (601) 634-2587.



## REMR Technical Reports

### Coastal

REMR-CO-1	Dec 86	Stability of Rubble-Mound Breakwater and Jetty Toes; Survey of Field Experience, by Dennis G. Markle.	AD A180 108
REMR-CO-2	Jan 89	Prototype Experience with the Use of Dissimilar Armor for Repair and Rehabilitation of Rubble-Mound Coastal Structures, by Robert D. Carver.	AD A204 081
REMR-CO-3		Case Histories of Corps Breakwater and Jetty Structures	
	Jun 88	Report 1 South Pacific Division, by Robert R. Bottin, Jr.	AD A192 294
	Sep 88	Report 2 South Atlantic Division, by Francis E. Sargent.	AD A200 458
	Jun 88	Report 3 North Central Division, by Robert R. Bottin, Jr.	AD A198 436
	Sep 88	Report 4 Pacific Ocean Division, by Francis E. Sargent, Dennis G. Markle, and Peter J. Grace.	AD A199 879
	Nov 88	Report 5 North Atlantic Division, by Ernest R. Smith.	AD A207 146
	Nov 88	Report 6 North Pacific Division, by Donald L. Ward.	AD A203 865
	Jan 89	Report 7 New England Division, by Francis E. Sargent and Robert R. Bottin, Jr.	AD A204 082
	Jan 89	Report 8 Lower Mississippi Valley Division, by Francis E. Sargent and Robert R. Bottin, Jr.	AD A204 083
	Jan 89	Report 9 Southwestern Division, by Francis E. Sargent and Robert R. Bottin, Jr.	AD A204 084
REMR-CO-4	Feb 88	Stability of Dolos and Tribar Overlays for Rehabilitation of Stone-Armored Rubble-Mound Breakwater and Jetty Trunks Subjected to Breaking Waves by Robert D. Carver and Brenda J. Wright.	AD A192 487

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REMR-CO-5	Jun 88	Stability of Dolos Overlays for Rehabilitation of Dolos-Armored Rubble-Mound Breakwater and Jetty Trunks Subjected to Breaking Waves, by Robert D. Carver and Brenda J. Wright.	AD A195 392
REMR-CO-6	Aug 88	Stability of Dolos Overlays for Rehabilitation of Tribar-Armored Rubble-Mound Breakwater and Jetty Trunks Subjected to Breaking Waves, by Robert D. Carver and Brenda J. Wright.	AD A198 877
REMR-CO-7	Oct 88	Methods to Reduce Wave Runup and Overtopping of Existing Structures, by John P. Ahrens.	AD A200 455
REMR-CO-8	Apr 89	State-of-the-Art Procedures for Sealing Coastal Structures with Grouts and Concretes, by David P. Simpson.	AD A208 884
REMR-CO-9	May 89	Stability of Dolos Overlays for Rehabilitation of Stone-Armored Rubble-Mound Breakwater Heads Subjected to Breaking Waves, by Robert D. Carver.	AD A208 577
REMR-CO-10	Aug 89	Study of Breakwaters Constructed One Layer of Armor Stone Detroit District, by John R. Wolf.	AD A212 631
REMR-CO-11	Feb 90	Underwater Inspection of Coastal Structures Using Commercially Available Sonars, by William M. Kucharsky and James E. Clausner	
REMR-CO-12	Sep 89	Stability of Toe Berm Armor Stone and Toe Buttreassing Stone on Rubble-Mound Breakwaters and Jetties, by Dennis G. Markle	
REMR-CO-13	Mar 90	Laboratory Techniques for Evaluating Effectiveness of Sealing Voids in Rubble-Mound Breakwaters and Jetties with Grouts and Concretes, by David P. Simpson and Jeffery L. Thomas	

## Concrete and Steel Structures

REMR-CS-1	Sep 84	Engineering Condition Survey of Concrete in Service, by Richard L. Stowe, and Henry T. Thornton, Jr.	AD A148 893
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REMR-CS-2	Apr 85	The Condition of Corps of Engineers Civil Works Concrete Structures, by James E. McDonald and Roy L. Campbell, Sr.	AD A157 992
REMR-CS-3	Jul 86	Latex Admixtures for Portland Cement Concrete and Mortar, by Dennis L. Bean and Tony B. Husbands.	AD A171 352
REMR-CS-4	Nov 86	Repair of Waterstop Failures: Case Histories, by James E. McDonald.	AD A176 937
REMR-CS-5		Instrumentation Automation for Concrete Structures	
	Dec 86	Report 1 Instrumentation Automation Techniques, by John Lindsey, David Edwards, Aubrey Keeter, Tom Payne, and Roger Malloy.	AD A178 139
	Jun 87	Report 2 Automation Hardware and Retrofitting Techniques, by Aubrey Keeter, Byron Stonecypher, Tom Payne, Mathew Skerl, Jim Burton, and James Jennings.	AD A192 753
	Jun 87	Report 3 Available Data Collection and Reduction Software, by Brian Currier and Marta H. Fenn.	AD A192 094
	Apr 89	Report 4 Demonstration of Instrumentation Automation Techniques at Beaver Dam, Eureka Springs, Arkansas, by Edward F. O'Neil.	AD A208 571
REMR-CS-6	May 87	In Situ Repair of Deteriorated Concrete in Hydraulic Structures: Feasibility Studies, by Ronald P. Webster and Lawrence E. Kukacka.	AD A182 297
REMR-CS-7	Jul 87	Design of a Precast Concrete Stay-In-Place Forming System for Lock Wall Rehabilitation, by ABAM Engineers, Inc.	AD A185 081
REMR-CS-8	Nov 87	Procedures and Devices for Underwater Cleaning of Civil Works Structures, by Carmela A. Keeney.	AD A188 814
REMR-CS-9	Apr 89	Inspection of the Engineering Condition of Underwater Concrete Structures, by Sandor Popovics and Willie E. McDonald.	AD A208 295

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REMR-CS-10	Dec 87	Development of Nondestructive Testing Systems for In Situ Evaluation of Concrete Structures, by Henry T. Thornton, Jr. and A. Michel Alexander.	AD A191 312
REMR-CS-11	Jan 88	In Situ Repair of Deteriorated Concrete in Hydraulic Structures: Laboratory Study, by Ronald P. Webster and Lawrence E. Kukacka.	AD A190 303
REMR-CS-12	Mar 88	Factors Related to the Performance of Concrete Repair Materials, by Lawrence I. Knab.	AD A192 818
REMR-CS-13	Dec 88	Rehabilitation of Navigation Lock Walls: Case Histories, by James E. McDonald.	AD A192 202
REMR-CS-14	Dec 87	A Demonstration of the Constructibility of a Precast Concrete Stay-in-Place Forming System for Lock Wall Rehabilitation, by ABAM Engineers, Inc.	AD A195 471
REMR-CS-15	Aug 88	Analysis of Concrete Cracking in Lock Wall Resurfacing, by C. Dean Norman, Roy L. Campbell, Sr., and Sharon Garner.	AD A198 437
REMR-CS-16	Jan 88	Repair of Dam Intake Structures and Conduits: Case Histories, by Roy L. Campbell, Sr and Dennis L. Bean.	AD A192 819
REMR-CS-17		Surface Treatments to Minimize Concrete Deterioration	
	Apr 88	Report 1 Survey of Field and Laboratory Application and Available Products, by Dennis L. Bean.	AD A195 069
REMR-CS-18	Apr 88	Evaluation of Concrete Mixtures for Use In Underwater Repairs, by Billy D. Neeley.	AD A193 897
REMR-CS-19	Sep 88	Review of the State of the Art for Underwater Repair Using Abrasion-Resistant Concrete, by Ben C. Gerwick, Inc.	AD A199 793
REMR-CS-20	Feb 89	Evaluation of Vinylester Resin for Anchor Embedment in Concrete, by James E. McDonald.	AD A206 847



REMR-CS-21	Apr 89	In Situ Repair of Deteriorated Concrete in Hydraulic Structures: A Field Study, by Ronald P. Webster, Lawrence E. Kukacka, and Dave Elling.	AD A208 913
REMR-CS-22	Aug 89	Monolith Joint Repairs: Case Histories, by James G. May and James E. McDonald.	AD A212 814
REMR-CS-23	Jan 90	Evaluation of Polyester Resin, Epoxy and Cement Grouts for Embedding Reinforcing Steel Bars in Hardened Concrete, by J. Floyd Best and James E. McDonald	AD A218 347
REMR-CS-24	Sep 89	Reliability of Steel Civil Works Structures, by Paul F. Mlakar, Sassan Toussi, Frank W. Kearney and Dawn White.	AD A212 922
REMR-CS-25	Jan 90	Spall Repair of Wet Concrete Surfaces, by J. Floyd Best and James E. McDonald	
REMR-CS-26	Oct 89	Analysis of a Short Pulse Radar Survey of Revetments Along the Mississippi River, by Steven A. Arcone.	AD A185 644
REMR-CS-27	Dec 89	User's Guide: Maintenance and Repair Materials Data Base for Concrete and Steel Structures, by Richard L. Stowe and Roy L. Campbell, Sr.	
REMR-CS-28	Dec 89	Concepts of Installation of the Precast Stay-in-Place Forming System for Lock Wall Rehabilitation in an Operational Lock, by ABAM Engineers, Inc. (See Part 5 for video)	
Unnumbered	Jan 87	Proceedings of REMR Workshop on Assessment of the Stability of Concrete Structures on Rock, 10-12 September 1985, compiled by William F. McCleese.	AD A185 644
Unnumbered	Aug 89	Sonar Probing of Concrete, by John H. Mims and Robert R. Unterberger.	

## Electrical and Mechanical

REMR-EM-1	Sep 87	A Review of Bird Pests and Their Management, by Anthony J. Krzysik.	AD A190 195
REMR-EM-2	Sep 87	Evaluation of Bird Pest Problems at U.S. Army Corps of Engineers Civil Works Projects, by Anthony J. Krzysik.	AD A191 173

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REMR-EM-4	Sep 89	Hydroelectric Generator and Generator-Motor Insulation Tests, by Robert H. Bruck and Ray G. McCormack.	AD A212 924
REMR-EM-5	Aug 89	Lubricants for Hydraulic Structures, by Ward B. Clifton and Alfred D. Beitelman.	AD A212 923
REMR-EM-6	Dec 89	Mechanical Properties and Corrosion Behavior of Stainless Steels for Locks, Dams, and Hydroelectric Plant Applications, by Ashok Kumar and Ali A. Odeh	
Unnumbered	Jun 89	Proceedings of REMR Workshop on Management of Bird Pests, by Anthony J. Krzysik.	AD A210 086

## Environmental Impacts

REMR-EI-1	Nov 86	Applicability of Environmental Laws to REMR Activities, by Jim E. Henderson and Linda D. Peyman.	AD A177 322
REMR-EI-2	Nov 86	Bibliography of Environmental Research Related to REMR, by Nelson R. Nunnally.	AD A177 069
REMR-EI-3	Aug 88	Compliance Requirements for Environmental Laws Applicable to REMR Activities, by Jim E. Henderson and Linda D. Peyman-Dove.	AD A200 193
REMR-EI-4	Aug 88	Seasonal Regulation of Repair, Evaluation, Maintenance, and Rehabilitation (REMR) Activities, by Mark W. LaSalle, John Nestler, and Andrew C. Miller.	AD A198 016

## Geotechnical

REMR-GT-1	Sep 84	Mathematical Analyses of Landside Seepage Berms, by Reginald A. Barron.	AD A150 014
REMR-GT-2	Aug 85	Improvement of Liquefiable Foundation Conditions Beneath Existing Structures, by Richard H. Ledbetter.	AD A160 695

REMR-GT-3		Geotechnical Aspects of Rock Erosion in Emergency Spillway Channels,	
	Aug 86	Report 1 by Christopher P. Cameron, Kerry D. Cato, Colin C. McAneny, and James H. May	AD A173 163
	Sep 88	Report 2 Analysis of Field and Laboratory Data by Christopher P. Cameron, David M. Patrick, Kerry D. Cato, and James H. May.	AD A203 774
	Sep 88	Report 3 Remediation, by Christopher P. Cameron, David M. Patrick, Craig O. Bartholomew, Allen W. Hatheway, and James H. May.	AD A203 775
		Report 4 Geologic and Hydrodynamic Controls on the Mechanics of Knick-point Migration, by James H. May	AD A216 749
REMR-GT-4	Nov 87	State of the Art for Design and Construction of Sand Compaction Piles, by Richard D. Barksdale.	AD A188 816
REMR-GT-5	Sep 87	Inspection and Control of Levee Underseepage During Flood Fights, by Robert W. Cunny.	AD A188 324
REMR-GT-6		Geotechnical Applications of the Self Potential (SP) Method	
	Mar 88	Report 1 The Use of Self Potential in the Detection of Subsurface Flow Patterns in and Around Sinkholes, by Ronald A. Erchul.	AD A194 524
	May 89	Report 2 The Use of Self Potential to Detect Ground-water Flow in Karst, by Ronald A. Erchul and Dennis W. Slifer.	AD A209 399
	Feb 89	Report 3 Development of Self-Potential Interpretation Techniques for Seepage Detection, by Robert W. Corwin and Dwain K. Butler.	AD A207 704
	Mar 90	Report 4 Numerical Modeling of Spanomalius: Documentation of Program SPPC and Applications, by Michael J. Wilt and Dwain K. Butler	
REMR-GT-7	Dec 87	Applications of the State of the Art of Stone Columns--Liquefaction, Local Bearing Failure, and Example Calculations, by Richard D. Barksdale.	AD A191 606

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REMR-GT-9	Mar 88	A Survey of Engineering Geophysics Capability and Practice in the Corps of Engineers, by Dwain K. Butler, Ronald E. Wahl, Nolan W. R. Mitchell, and Gregory L. Hempen.	AD A194 520
REMR-GT-10	Jul 89	High Resolution Seismic Reflection Investigations at Beaver Dam, Arkansas, by Thomas L. Dobecki, Tanya L. Mueller, and Monroe B. Savage.	AD A211 228
REMR-GT-11	Sep 89	Levee Underseepage Analysis for Special Foundation Conditions, by Thomas F. Wolff.	
REMR-GT-12	Sep 89	Re-Evaluation of the Sliding Stability of Concrete Structures on Rock with Emphasis on European Experience, by K. Kovari and P. Fritz.	
REMR-GT-13	Sep 89	Levee Underseepage Software User Manual and Validation, by Robert W. Cunny, Victor M. Agostinelli, Jr., and Hugh M. Taylor, Jr.	
REMR-GT-14	Mar 90	Surface Roughness Characterization of Rock Masses Using the Fractal Dimension and the Variogram, by James R. Carr	
Unnumbered	Jan 88	Proceedings of REMR Workshop on New Remedial Seepage Control Methods for Embankment-Dams and Soil Foundations, by Edward B. Perry.	
Unnumbered	Jul 89	Proceedings of REMR Workshop on Research Priorities for Drainage System and Relief Well Problems, by Roy E. Leach and Hugh M. Taylor, Jr.	

## Hydraulics

REMR-HY-1	Jul 86	Annotated Bibliography for Navigation Training Structures, Compiled by Walter E. Pankow and Robert F. Athow, Jr.	AD A173 303
REMR-HY-2	Jun 87	Floating Debris Control; A Literature Review, by Roscoe E. Perham.	AD A184 033

REMR-HY-3	Sep 88	Elements of Floating Debris Control Systems, by Roscoe E. Perham.	AD A200 454
REMR-HY-4	Mar 89	Effects of Geometry on the Kinetic Energy of a Towboat and Barges in a Navigation Lock, by Sandra K. Martin.	AD A207 057
REMR-HY-5	Mar 89	Explicit Numerical Algorithm for Modeling Incompressible Approach Flow, by Robert S. Bernard.	AD A207 176
REMR-HY-6	Oct 89	Inventory of River Training Structures in Shallow-Draft Waterways, by David L. Derrick, Herbert W. Gernand, and James P. Crutchfield.	

### Operations Management

REMR-OM-1	May 86	Evaluation of Existing Condition Rating Procedures for Civil Works Structures and Facilities, by Enno Koehn and Anthony M. Kao.	AD A170 391
REMR-OM-2	Sep 88	REMR Managment System, by H. Thomas Yu and Anthony M. Kao.	AD A200 728
REMR-OM-3	Jun 89	User's Manual: Inspection and Rating of Steel Sheet Pile Structures, by Lowell Greimann and James Stecker.	AD A210 411
REMR-OM-4	May 89	A Rating System for the Concrete in Navigation Lock Monoliths, by Rupert E. Bullock.	AD A208 304
REMR-OM-5	Sep 89	Timber Dike Management System, by H. Thomas Yu and Anthony M. Kao.	
REMR-OM-6	Dec 89	Network Level REMR Management System for Civil Work Structures: Concept Demonstration on Inland Waterways Locks, by Michael J. Markow, Sue McNeil, Dharma Acharya, and Mark Brown	



## PART 3

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### REMR Technical Notes

REMR Technical Notes are loose-leafed fact sheets on techniques, materials, and equipment used in REMR research. This section lists all the fact sheets published in *The REMR Notebook* through September 1990. The first two letters of a technical note number correspond to the code for the section of the notebook which contains the technical note.

- CM -- CONCRETE MATERIALS
- CO--COASTAL
- CS -- CONCRETE AND STEEL STRUCTURES
- EI -- ENVIRONMENTAL IMPACTS
- EM -- ELECTRICAL AND MECHANICAL
- GT--GEOTECHNICAL
- HY--HYDRAULICS
- OM -- OPERATIONS MANAGEMENT

*The REMR Notebook* is intended as a quick reference document. It is a collection of technical notes that address REMR activities at US Army Corps of Engineers civil works projects. Each technical note lists a statement of purpose and a point of contact for additional information. It may also include when and where to apply the technology described, advantages and limitations of its use, cost and availability of products or services, and personnel requirements. A copy of the notebook has been distributed to the Engineering Construction, Operations and Planning Division of each Corps District and Division as well as to the libraries of each district and division. Copies of Vol I & II through Suppl 5 for personal use can be purchased for \$65.00 by writing Commander and Director, US Army Engineer Waterways Experiment Station, ATTN: CEWES-SC-A (TTS), 3909 Halls Ferry Road, Vicksburg, Miss. 39180-6199.





## **REMR Technical Notes**

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### **COASTAL**

CO-BS-1.1	Two-Person Rapid Beach Survey Method
CO-RA-1.1	Condition Survey of Concrete Armor Unit Breakage on Existing Corps of Engineers' Breakwaters and Jetties
CO-RR-1.1	Dolos Repair and Rehabilitation
CO-RR-1.2	Fracturing of Rubble Stone by Explosive Charges
CO-RR-1.3	Reduction of Wave Runup on a Revetment by Addition of a Berm
CO-RR-8.1	Case History of Breakwater/Jetty Repair: Chemical Grout Sealing of Palm Beach Harbor South Jetty, Florida
CO-SE-1.1	Diver Inspection of Coastal Structures
CO-SE-1.2	Crane Survey of Submerged Rubble-Mound Coastal Structures
CO-SE-1.3	High-Resolution Sonar Systems for Bathymetric Applications
CO-SE-1.4	Side Scan Sonar for Inspection of Coastal Structures

### **CONCRETE AND STEEL STRUCTURES**

CS-ES-1.1	System for Rapid Assessment of Quality of Concrete in Existing Structures
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### "THE REMR Bulletin" Articles

This section lists all technical articles published in *The REMR Bulletin* through September 1990. The articles are listed by volume and number of the issue in which they appeared. The title and author of each article is provided. A bulletin article listed in Part 1 as RP-2-3 can be found under Vol. 2 No. 3.



## **"The REMR Bulletin" Articles**

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| Vol 1, No. 1, Jan 1984 | "The REMR Research Program"   |
| Vol 1, No. 2, Apr 1984 | "Mobile District Hosts Third Field Review Group Meeting"  |
| Vol 1, No. 3, Jul 1984 | "Acrylic Latex Concrete Repair" by Rosemarie Braatz<br>"Seattle District Testing Novel Approach to Reducing Spillway Leakage at Chief Joseph Dam" by Paul Johnson   |
| Vol 1, No. 4, Oct 1984 | "Memphis District Turns Riverward for Levee Rehabilitation" by Joseph Keithley, Jr., and Paul Miller<br>"CAGE Project Can Aid Data Gathering and Analysis for Geotechnical Applications" by Wipawi Vanadit-Ellis<br>"Construction of Soil-Cement Columns by Jet-Injection Grouting" by Max Gibbs, Paul Pettit, and Georgio Guatteri |
| Vol 2, No. 1, Mar 1985 | "Mining Tool Adapted to Concrete Removal for Lock Wall Rehabilitation Project" by Warren Parr<br>"Corps-BuRec Effort Results in High-Resolution Acoustic Mapping System" by Henry Thornton  |
| Vol 2, No. 2, Jun 1985 | "French Drilling Machine Shows Advantages in Excavating for Concrete Cutoff Wall" by Charles Hess<br>"Geophysical Methods Applied to Detect and Map Seepage Paths at Clearwater Dam" by Dwain Butler  |
| Vol 2, No. 3, Sep 1985 | "New Technique for Waterstop Replacement Used at Pine Flat Dam" by Debra Tanis<br>"Performance of Repairs to Stop Leakage in Intake Structures" by James McKenzie and Roy Campbell  |
| Vol 3, No. 1, Apr 1986 | "Current Methods for Repairing Scoured Areas Downstream from Stilling Basins" by John Hite, Jr.<br>"Research Under Way on Problems with Estuarine and Deep Draft Navigation Channel Training Structures" by Robert Athow, Jr., and Michael Trawle   |
| Vol 3, No. 2, Sep 1986 | "Floating Debris Control Systems for Hydroelectric Plant Intakes" by Roscoe Perham<br>"Protection of Lock Gates from Vessel Impact" by Sandra McKay   |
| Vol 3, No. 3, Dec 1986 | "Results from TVA Testing of Grouting Systems for Concrete Anchors" by James McDonald<br>"Precast Panels Speed Rehabilitation of Placer Creek Channel" by Kathy Hacker  |

- Vol 4, No. 1, Jul 1987 "Precast Concrete Stay-In-Place Forming System for Lock Wall Rehabilitation" by James McDonald  
"Remedial Measures to Control Excessive Leakage at Richard B. Russell Dam" by Gary Close and John Hager
- Vol 4, No. 2, Oct 1987 "Anti-Washout Admixtures for Use in Underwater Concrete Placement" by Kenneth Saucier and Billy Neeley  
"Use of Fiber-Reinforced Acrylic Polymer Modified Concrete as Repair Material at Lock 2" by Michael Dahlquist
- Vol 4, No. 3, Nov 1987 "Nondestructive Testing of Foundation at Lock No. 2, Mississippi River" by Michael Dahlquist  
"Chemical Grout Used to Stop Water Leakage in Control Towers and Conduits" by Rick Lewis and Larry Brockman  
"Chemical and Asphaltic Grouts for Sealing Coastal Structures to Sand Infiltration and Wave Transmission" by David Simpson
- Vol 4, No. 4, Dec 1987 "Concrete Rehabilitation at Lock and Dam No. 20, Mississippi River" by Jerry Wickersham  
"Epoxy Repair of Cracked Wooden Roof Trusses" by MAJ Sean Wachutka  
"Stabilized Channel Maintenance and Aquatic Habitat" by Douglas Shields, Jr.
- Vol 5, No. 1, Mar 1988 "Spillway Rehabilitation at Grapevine Lake Fort Worth District" by Ronald Turner  
"Ultrasonic Pulse-Echo Measurements of the Concrete Sea Wall at Marina Del Rey Los Angeles County, California" by Henry Thornton and Michel Alexander  
"Environmental Impacts of Stilling Basin Dewaterings" by Marc Zimmerman
- Vol 5, No. 2, Jul 1988 "Evaluation of Vinylester Resin for Anchor Embedment in Concrete" by James McDonald  
"Floating Debris Boom Evaluation Program Summary" by Rosco Perham  
"Comparison of Corps of Engineers' and US Bureau of Reclamation's Methods for Calculating Uplift Pressures" by Carl Pace
- Vol 5, No. 3, Sep 1988 "Use of New Well Redevelopment Techniques on Relief Wells in Upper Wood River Drainage and Levee District" by Joseph A. Kissane  
"Determination of Relief Well Infestation with the Use of Bacterial Activity Test (BAT) Kit" by Roy Leach  
"Jetty Repair Projects: Potential Beneficial Impacts" by Douglas G. Clarke

- Vol 6, No. 1, Feb 1989 "Performance of Polyester Resin Grouted Rockbolts Installed Under Wet Conditions" by Tim Avery  
 "Deposition of Calcium Carbonate in Foundation Drain Holes" by Andrew Schaffer  
 "Effects of a Stearic-Acid Based Admixture on Water Repellency of Concrete" by Kim Titus
- Vol 6, No. 2, May 1989 "In Situ Repair of Deteriorated Concrete" by James E. McDonald  
 "Rehabilitation of Crow Dam Gate Tower" by Robert V. Todd
- Vol 6, No. 3, Jul 1989 "Innovative Products and Procedures Used on Chouteau Island Levee Relocation" by Tamara L. Atchley  
 "Cutoff Wall Construction to Upgrade Mud Mountain Dam" by K. D. Graybeal  
 "A Review of "Flume Investigation of a Composite, Erosion Resistant Material"" by Jerry Lee Anderson and Robert F Athow
- Vol 6, No. 4, Oct 1989 "Rehabilitation of Peoria Lock Using Preplaced-Aggregate Concrete" by George J. Mech  
 "The Repair of Large Concrete Structures by Epoxy Resin Bonding" by Dr. Donald A. Bruce  
 "Surface Treatments for Concrete" by Tony B. Husbands and Fred E. Causey
- Vol 6, No. 5, Dec 1989 "Diamond Wire Cutting Used on Concrete at Marseilles Dam" by Michael W. Edwards  
 "Evaluation of Water Jet Blasting for Removal of Concrete from Lock Chamber Faces" by Roy L.. Campbell, Sr.  
 "Mechanical Presplitting Technique Used in Removal of Concrete from Chamber Face at Dashields Lock" by Doug Meley
- Vol 7, No. 1, Jan 1990 "Culvert Repair at Enid Lake, Mississippi" by Elke Briuer  
 "Continuous Deformation Surveillance of Large Structures Possible with New Monitoring System" by Carl A. Lanigan  
 "A Practical Application of a Low-Berm Revetment" by Heidi Pfeiffer and John P. Ahrens
- Vol 7, No. 2, Jul 1990 "Underwater--Quick Set and Cement Grouting, An Innovative Method to Rehabilitate Milwaukee Harbor Breakwater" by Ronald L. Erickson, William A. Rito, and Thomas A. Deja  
 "Lime-Fly Ash Slurry Pressure Injection of Clay Soils for Levee Stabilization" by Dennis Abernathy and Mel Stegall





## **PART 5**

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### **REMR Technology Videos**

REMR technology videos are available through the Inter-Library Loan Service. A local librarian can request copies of the videos by calling the U. S. Army Engineer Waterways Experiment Station Library at (601) 634-2355. These tapes may be copied and can be used for private viewing, to support classroom instruction, or during presentations.



## REMR Videos

**REMR-CS-1** Remedial Waterstop Installation at Pine Flat Dam, Dec 86, 13 min, 1/2-in. (See *The REMR Bulletin*, Vol 2, No. 3)

**REMR-CS-2** Precast Concrete Stay-in-Place Forming System for Lock Wall Rehabilitation, Jul 88, 20 min, 1/2- & 3/4-in. (See Technical Report REMR-CS-14)

**REMR-CS-3** Antiwashout Admixtures for Use in Underwater Concrete Placement, Mar 89, 15 min 20 sec, 1/2-in. (See Technical Report REMR-CS-19 and Technical Note CS-MR-7.2)

**REMR-GT-1** Computer Monitoring of Foundation Grouting, Jun 86, 10 min, 1/2- & 3/4-in.

**REMR-HY-1** Excessive Scour Downstream of High Level Emergency Spillways, Oct 87, 20 min, 1/2- & 3/4-in. (See Technical Note HY-FC-1.1)

**REMR-PM-1** Overview of the Repair, Evaluation, Maintenance and Rehabilitation (REMR) Research Program, Apr 85, 17-1/2 min, 3/4-in. (See Technical Report Unnumbered CS83)

**Workshop:** Underwater Inspection & Repair of Hydraulic Structures, 27-28 Nov 84, 1/2-in. (See also Technical Report REMR-CO-11)

**Tape 1:** Introduction and REMR Overview, CPT Wylie Bearup, 7 min  
Concrete & Steel Problem Area, J.E. McDonald, 7-1/2 min  
Underwater Inspection of Coastal Structures, Gary Howell, 47 min

**Tape 2:** Naval Facilities Specialized Inspection Program, Phil Scola, 51 min

**Tape 3:** Underwater Survey Techniques of the Naval Explosive Ordinance Disposal Technology Center, John Pennella, 17 min  
Inspection Techniques in Turbid Water, Dan McGeehan, 18 min  
Inspection of Kinzua Dam, Anton Kryza, 25 min

**Tape 4:** Underwater Survey and Repair (TVA), Dave Hegseth, 23 min  
Inspection of R. D. Bailey Dam, Lloyd Schell, 20 min

**Tape 5:** Underwater Repair and New Survey Techniques, Steve Tatro, 32 min

**Tape 6:** Wynoochee and Chief Joseph Dams Investigation and Repair, George England and Paul Johnson, 40 min  
Repair of Lock and Dam 26, Mel Stegall, 16 min

**Tape 7:** Weber Falls Stilling Basin Repair, Reggie Kikugawa, 30 min

**Tapes 7 & 8:** Underwater Repair of Hydraulic Structures, John Baehr, 46 min

**Tape 8:** FY 85 REMR Research Program Review, REMR Staff, 39-1/2 min

**Workshop:** New Remedial Seepage Control Methods for Embankment-Dams and Soil Foundations, 21-22 Oct 86, 1/2- and 3/4-in. (See Technical Report Unnumbered GT88)

**Tape 1:** Introduction, REMR Overview, LTC Jack Stephens, William F. McCleese, Britt Mitchell, Edward B. Perry, Joe Kauschinger, 30 min

**Tape 2:** Chemical and Micro-Fine Grouting, Reuben Karol, 58 min

**Tape 3:** Drains, Wally Sherman, 40 min

**Tape 4:** Upstream Impervious Blanket, Bill Morrison, 44 min

**Tape 5:** Reinforced Downstream Berms, Mike Duncan, 58 min

**Tapes 6 & 6A:** Plastic Concrete Cutoff Walls, George Tamaro, 72 min

**Tape 7:** Jet Grouted Cutoff Wall, Giorgio Guatteri, 60 min

**Tape 7A:** Dynamic Grouting by High, Giorgio Guatteri, 22 min

**Tape 8:** Use of Hydrofraise to Construct Concrete Cutoff Walls, Joe Parkington, 61 min

**Tapes 9 & 9A:** Ground Freezing as a Construction Expediency for Excavating Cutoff Trenches and/or Installation of Drains, John Shuster, 75 min

**Tape 10:** Panel Discussion, Joe Kauschinger, 60 min

**Workshop:** Repair and Maintenance of Shallow-Draft Training Structures, 24-25 Feb 87, 3 hr 32 min